README.TXT

Adaptec ASR-3085/ASR-3405/ASR-3805/ASR-31205/ASR-31605/

as of February 10, 2008

Please review this file for important information about issues
and errata that were discovered after completion of the standard
product documentation. In the case of conflict between various
parts of the documentation set, this file contains the most
current information.

NOTE: The latest firmware, BIOS, drivers and documentation can be downloaded
from www.adaptec.com. when they become available.

The following information is available in this file:

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1. Software and Documentation

1.1. Controller & Utility Software

Note: The latest versions of firmware, BIOS and driver software
can be downloaded from www.adaptec.com when they become
available.

- BIOS

- ACU

- Windows Drivers

  o Windows 2003 Server, Enterprise, Standard, and Web Edition
  o Windows 2008 Server, Enterprise, and Standard
  o Windows XP All versions
  o Windows Vista - All versions

- Linux Drivers

  o Red Hat Enterprise 4.0, IA-32 and x64
  o Red Hat Enterprise 5.0, IA-32 and x64
  o SuSE Linux Enterprise Server 9.0, IA-32 and x64
  o SuSE Linux Enterprise Server 10.0, IA-32 and x64

- FreeBSD Drivers

  o FreeBSD 5.4 (ARCCONF 32-bit)
  o FreeBSD 6.1/6.2 (ARCCONF 32/64-bit)

- SCO Drivers

  o OpenServer 6.0
  o UnixWare 7.1.4

- VMware Drivers

  o VMware ESX Server 3.0.x

- Sun Solaris Drivers

  o Solaris 10 Update 1

1.2. Documentation on this CD

- Adaptec SAS and SATA RAID Controllers Installation and User's Guide

- Adaptec SAS and SATA RAID Controllers README.TXT file

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2. Installation Instructions

- The Adaptec SAS and SATA RAID Controllers Installation and User's Guide contains complete installation information for the controllers and drivers, as well as complete instructions for all utilities. The Adaptec Storage Manager User's Guide contains complete installation information for the Adaptec Storage Manager software.

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3. General Cautions

- While an array is being built or cleared, DO NOT remove and reinsert any drive from that array. Doing so may cause unpredictable results for any of the controller's arrays.

- While a drive is being cleared, DO NOT try to include it in a new array. Doing so may cause unpredictable results.

- DO NOT move drives containing an array or volume from one controller to another while the power is on. Doing so could cause the loss of the array configuration or data, or both. Instead, power off both affected controllers, move the drives, and then restart.

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4. Known Limitations

4.1 Using the controller in a Dell Precision 530

When using the controller in a Dell Precision 530 with Diskercise and Diskstress, data corruption/mis-compares may occur.

4.2 ACU utility

On some Intel and IBM systems, when you try to run the ACU, this message appears:
“Not enough free memory to load the utility!
Press any key to attempt loading the utility forcibly
OR Wait for the system initialization to be completed
[Default]”
This is normal. On Intel systems, wait for the system initialization to be completed. Then the ACU will run. On IBM systems, press any key when prompted to load the utility forcibly.

4.3 FreeBSD and VMware

Adaptec Storage Manager is not supported in FreeBSD or VMware; storage management must be done through the Adaptec Configuration Utility (ACU) and ARCCONF command line utility. Refer to the User Guides on the two CDs that were provided with your controller.

4.4 Adaptec Storage Manager

After a rebuild and waking up from hibernation, a controller may be detected incorrectly in Adaptec Storage Manager. Press F5 to correct the problem.

4.5 SAS controllers and Adaptec 335SAS enclosure

When the Adaptec 335SAS enclosure is attached to an Adaptec SAS controller, such as ASR-3405SAS or ASR-3805SAS, the enclosure numbering nomenclature starts with "0". For example, if two Adaptec 335SAS enclosures are connected to a ASR-3805SAS SAS controller, management tools such as Storage Manager will denote the enclosures as "Enclosure 0" and "Enclosure 1".

4.6 OpenServer 6.0

Arrays may not be displayed correctly, even after you restart your computer.

To resolve the problem:

As root, run 'resmgr -r -m vtoc' until it fails. Then, as root, run '/etc/conf/bin/idconfupdate -f'. Then, reboot.

4.7 Creating an Array from the Adaptec Storage Manager CD

When you create an array with the Adaptec Storage Manager bootable CD, the maximum size of the array is 2 TB.

4.8 Using the controller with an Adaptec S50 JBOD Enclosure

Temperature warnings from Adaptec S50 JBOD Enclosure (firmware version T016) are not shown in Adaptec Storage Manager (or on the enclosure).

4.9 RAID 10/50/60 array leg limitations

A RAID 10, RAID 50, or RAID 60 array cannot have more than 32 legs when created using the Build method. Maximum disk drive count is only limited by RAID level. For instance, a RAID 10 array built with 32 RAID 1 legs (64 disk drives) is supported; a RAID 5 array built with 32 RAID 5 legs (96 disk drives) is also supported. Although you can create a RAID 10 array with more than 64 drives using the Quick Init method, the maximum number of build/verify operations that can happen at any one time is 32; therefore, such an array could not be verified.

4.10 Microsoft VDS Storage Manager LUN Error

On some systems when creating a new LUN, the Microsoft VDS Storage Manager for SANs snap-in may not work properly and crash with an MMC snap-in error.

4.11 UnixWare and OpenServer

Adding or moving controllers in an existing UnixWare or OpenServer system may cause some device resources to change, which may lead to the operating system being unable to boot. Currently, there is no workaround available in the operating system. Before installing the operating system, make sure all PCI devices are either enabled or installed.

The individual behavior and affected devices will vary from system to system. This is due to the different ways in which motherboards may handle their PCI bus layouts, and how those layouts could be changed when installing or rearranging devices. If the bus layout changes and affects a critical system device (video, boot controller, etc.) then the operating system may be unable to recover from that change and be non-bootable.

4.12 ASR-31205/ASR-31605 with Sony SDX-470V tape drive

Backing up large files (800MB or larger) to a Sony SDX-470V tape drive may generate an input/output error.

4.13 SATA disks do not support Dual Path with Expanders

Connect Dual Path SAS Enclosures with 2 Expanders only via one Expander when using SATA disks as SATA disks do not natively support Dual Path. If SATA disks are connected using 2 Expanders the controller BIOS may crash if interposer cards are not used.

4.14 DOS OS not supported

The DOS environment is supported for Adaptec tool execution only (AFU.EXE and ACU.EXE).

4.15 DAT drive restoration fails when spanning tapes

When restoring from two or more tapes with a Sony SDX-470, Sony SDX-570, or Quantum DLT V4 DAT drive, the operation aborts automatically when restoring the second tape but gives the (erroneous) message "Restore Operation has Completed".

4.16 Hot-adding Disk Drives

If you hot-add multiple disks simultaneously to a large configuration (100 disk drives or more), it may take an extended length of time before those disk drives appear in Adaptec Storage Manager.

With Intel Backplanes AXX4DRV3GEXP and AXX6DRV3GEXP, if a drive bay is empty at enclosure power on and then a SATA disk drive is hot-added into the empty bay, the controller does not detect the new disk drive. To work around this issue, remove and reinsert the SATA disk.

4.17 Booting From Non-DASD Devices

If your system includes multiple non-DASD (non-Direct Access Storage Device) devices, the CD or DVD drive must be the first enumerated non-DASD device in order to run the bootable CD included with your controller.

4.18 Western Digital Disk Drives

Currently, Western Digital WDC1500ADFD disk drives are not supported.

4.19 Maxtor Disk Drives

Currently, Maxtor DiamondMax 17 6G160E0 disk drives are not supported.

4.20 SuperMicro Disk Drive Enclosures

If the controller does not detect disk drives installed in a SuperMicro M28E2 Mobile Rack, use backplane SAS connectors marked with “SAS In” only.

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